

# The Evolution of the Smart City in Italy: An Empirical Investigation on the Importance of Smart Services



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**Abstract** This chapter aims to bring to light the most used and requested smart city services to suggest to public managers the areas on which they should work to foster the development of the smart city. Starting from an overview of the smart city concept, the chapter offers an in-depth analysis of smart services in the Italian context. Based on an empirical investigation, the study aims to analyze the most popular services used by citizens and the areas in which policymakers should intervene to raise Italian smart cities. By analyzing the results, we try to provide interesting suggestions that can make improvements to the management of the Italian services.

**Keywords** Smart city · Smart services · Technology · Smart ecosystem

## 1 Introduction

The city has great relevance in the economic, environmental and social development process. Therefore, it is necessary to rethink urban spaces, rationalizing resources and making the provision of services more efficient. These needs lead to the emergence of the smart city phenomenon.

A smart city is a city that uses its resources in a “smart” way, aiming at becoming economically sustainable, energy self-sufficient and attentive to the quality of citizens life. Furthermore, the term smart city is intended as a city that, through Information and Communications Technology (ICT), favors citizens’ participation in the definition and implementation of an integrated system of sustainable urban policies aimed at improving the quality of life and the well-being of citizens (OECD, 2020).

During the years, the phenomenon of smart city has been studied from different perspectives and by scholars of different disciplines, therefore the literature doesn’t

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offer a shared definition of the smart city. Despite the multidisciplinary approach to the phenomenon, the argument most often debated among scholars concerns how ICT can improve services and make a smart city more efficient. Several studies focus on citizens' perception of smart services, to provide useful insights for policymakers (Lytras & Visvizi, 2020; Lytras et al., 2020).

Although the extensive international literature on the topic, there is a lack of recent studies on Italian citizens' perception of smart services. According to data from a 2012 study (TEH-Ambrosetti, 2012), Italian citizens would have little knowledge of the smart city phenomenon; 4 out of 5 Italians had never heard the word "smart city". Today, almost 10 years later this study, many steps forward have been made. Many Italian cities stand out for their economic solidity and sustainable mobility, social qualities and digital transformation (ICity Rank 2019).

Based on this information, this chapter aims to fill the gap in the literature by updating the data relating to Italian citizens' perception of smart services. Particularly, this research aims to bring to light the most used smart city services and the most requested smart services, to understand what are the smart services used by the Italian population and to suggest to public managers the areas on which they could work to support the development of Italian smart cities.

Specifically, the chapter wants to answer the following research questions:

RQ1: What are the smart services most used and most requested by Italian citizens?

RQ2: What are the areas in which policymakers should intervene to make Italian smart cities efficient?

The chapter starts with an overview of the smart city concept, including the different definitions and dimensions. The importance of smart collaboration is highlighted, in line with the recent service theories (such as Service-Dominant Logic—Vargo & Lusch, 2004, and Service Science—Maglio et al., 2006). Moreover, an overview of events and experiences related to smart services in the Italian context is proposed. Based on an empirical investigation, the study analyzes the most used and most requested services by Italian citizens. The results show how the smart rethinking of urban areas can be one of the solutions to environmental and social problems and can promote economic growth, thanks to the opportunities offered by new technologies.

## **2 Theoretical Background**

### ***2.1 Smart City Definition***

Over the past decade, the concept of smart city has been at the centre of numerous debates that gave rise to a wide range of definitions aimed at identifying the characteristics of the phenomenon and the development processes that transform an urban agglomeration into a smart city. Particularly, two events contributed to the smart city

development (Cocchia, 2014): urbanization and ICTs spread. The concomitance of these two events led to the concept of smart city, which was initially intended as a city in which urban problems are solved thanks to ICT.

The concept of smart city, over time, has evolved into a holistic vision that effectively addressed different fields (Toppeta, 2010): services, participatory policies, social inclusion, economy, environmental protection, governance for sustainable development. For this reason, several scholars point out that smart city research requires interdisciplinary and multidisciplinary approaches to cover the multitude of topics and issues relevant to the field (Kitchin, 2015, Visvizi and Lytras 2018a). Such cross-fertilization among different fields of research aims at generating added value for the inhabitants of a city, through the use of ICT (Visvizi and Lytras, 2018b; De Maio et al., 2015).

Due to the different perspectives of analysis of the phenomenon, in the literature, there is still no clear and common definition of the smart city shared by the academic, political and industrial world. The smart city is a poorly defined concept (Albino et al., 2015). Depending on the meaning attributed to the word “smart”, a different definition of the smart city follows. Cocchia (2014, p.19) analyzes different meanings of “smart” word and lists all the definitions used in the literature to describe a smart city. His result led to many definitions, such as intelligent city, knowledge city, ubiquitous city, digital city, sustainable city, virtual city, smart community, learning city.

The common element of all the abovementioned definitions is the impact of technologies on new forms of policy and planning (Hollands, 2008; Schuler, 2002; Anthopoulos & Fitsilis, 2010; Komninos, 2006; Couclelis, 2004; California Institute, 2001; Ergazakis et al., 2004, OECD, 1999, 2010; Batagan, 2011). In particular, the extended concept of the smart city represents the perfect synthesis of a series of elements and characteristics aimed at promoting environmental sustainability and socio-economic development, through key objectives, which are mainly expressed: in the improvement of environmental conditions in terms of reduction of carbon dioxide emissions, pollutants and waste disposal (OECD, 2010), in the use of renewable energy sources (Batagan, 2011), in the dissemination of knowledge understood as the capacity and competence thanks to which stakeholders of the smart city can take full advantage of innovative products and services, drawing socio-economic advantages (OECD, 1999; Ergazakis et al., 2004; Komnios, 2006).

Furthermore, the smart city aims to encourage the active involvement of all actors through the dissemination of e-government and e-democracy tools, focusing on improving the level of quality of life and well-being of citizens (Couclelis, 2004; California Institute, 2001). A city, therefore, can be considered "smart" if it integrates and synthesizes data produced by any type of sensor to improve the efficiency, sustainability, equity and quality of life of the city itself. Among the many definitions of the smart city, taking into account the different aspects abovementioned (Caragliu et al., 2011; Dameri, 2012; Hall, 2000), we propose a complete definition of all the elements discussed above. It is the definition of the Cassa Depositi e Prestiti (2013) that defines the smart city as a city that, according to a strategic vision and in an organic way, uses ICT tools as an innovative support for management areas and

in the provision of public services to improve the livability of its citizens. It is a city that uses information from various fields in real-time and exploits both tangible resources (e.g. transport infrastructures, energy and natural resources) and intangible (human capital, education and knowledge, the intellectual capital of companies). A city capable of aiming at an abstract projection of the community of the future [...] and that aims to improve the lives of citizens by guaranteeing the lowest possible environmental impact.

## 2.2 *Smart City Dimensions*

In the document “Mapping smart cities in the EU”, European Parliament’s Committee on Industry, Research and Energy (ITRE) stated that in any smart city initiative or project there must be at least one of the six characteristics listed in the European smart city project. Six characteristics are smart economy, smart mobility, smart governance, smart environment, smart people, smart living.

The first domain of application of the initiatives (smart economy) refers to the set of projects and activities that exploit ICT for the performance and development of their business, the promotion and trade of goods and services. The smart economy favors the birth of new ideas and new products and new entrepreneurship models. The strong point on which smart economy leverages is the innovative spirit that must distinguish the smart city: an intelligent economy is innovative, closely linked to entrepreneurship, and can promote at the same time a high-quality environment, greater security of energy supply as well as economic and social cohesion.

The second domain of application of the initiatives (smart mobility) is defined by the World Business Council for Sustainable Development, “the possibility of moving freely, communicating and establishing relationships without ever losing sight of the human and environmental aspects, today as in future”. Smart mobility is citizen-friendly mobility and allows the management of mobility flows to reduce congestion, downtime, inefficiencies and risks, also providing citizens with services tailored and customized.

The third area of the mentioned list (smart governance) concerns the administration. By smart governance we mean the inclusive process of balanced and rational management of resources, collaboration and integration between public, private, civil and European organizations so that the city can function efficiently and effectively as a single body. Technology is a fundamental tool at the service of governance for the achievement of the objectives of the smart city, as it allows, through public-private partnerships, the collaboration between the different actors who live and work in cities. More specifically, ICTs are tools used to allow connection among actors, to ensure transparency, and to remove the obstacles to innovative development posed by bureaucratization. On the one hand, ICT could ensure a more fluid use of the services offered to citizens and, on the other hand, would encourage their active participation in the administrative life of the city.

The fourth dimension is the smart environment. Smart environments are the use of renewable energy sources, the monitoring of pollution, the management and reduction of waste through separate collection, the planning of sustainable buildings, the use of smart grids and intelligent lighting.

The fifth characteristic of the smart city is Smart People. It acts as a common thread for the other characteristics and represents the enhancement of human capital. In a smart city, citizens represent the elements capable of developing and sharing ideas and technologies in their local context and transferring them to the global world. Smart citizens possess technical skills and the ability to use ICT. He's able to provide input to the community in various sectors. The smart city, therefore, supports co-planning and collaboration between the different actors, through a direct relationship between citizens and institutions, based on mutual trust.

Finally, it should be emphasized how the involvement and collaboration of the main actors of a city are a fundamental requirement to make it possible to integrate the technologies that favour the development of Smart Living. This area refers to the lifestyle, behaviour and consumption of citizens, and is related to high levels of social cohesion and the development of social capital. As happens in the mobility sector (Ning et al., 2017), domestic life and the urban environment (Liu et al., 2015), also in health (Botti & Monda, 2020), safety (Lacinák & Ristvej, 2017), culture and tourism sectors (Troisi et al., 2019a; Polese et al., 2018) smart components come into force to improve the landscape and environmental enhancement of a territory, as well as to create a more sustainable use. Smart living is related to those innovative and intelligent technology solutions that make life easier for a citizen, whether they are used inside a home, in the cultural and artistic sphere, in the service and catering sector, in mobility and in the intelligent way of moving within an urban context.

Finally, the transformation towards a "smarter" city is complete when innovation is also present in planning and management operations (Naphade et al., 2011). A city that intends to become smart must, that is, assess its innovation needs and opportunities, prioritize development efforts, set clear goals and metrics that allow city planners, ICT consultants and residents to assess progress. Developing a city strategy is the most complex but fundamental step to becoming a smart, differentiated and attractive city: evaluating the main systems and activities of a city represents the first step towards more sustainable prosperity, through the use of solutions and practices of intelligent management.

### ***2.3 Smarter City and Smart Collaboration***

Each city is a complex network of actors and components: citizens, businesses, transport, communications, energy, services. The integration of these elements and actor involvement and collaboration are the basic elements of a smart city. To achieve new levels of effectiveness and efficiency a series of interdependent public and private systems are integrated and optimized in a smart city. For this reason, Naphade et al. (2011) define smart city as a "system of systems". The systems that make up the smart

city are, at the same time, producers and beneficiaries of information, promoting a resource exchange of information.

From this point of view, the concept of smart city is in line with some recent service theories, such as Service-Dominant logic (Vargo & Lusch, 2004, 2008, 2011) and Service Science (Maglio & Spohrer, 2008; Maglio et al., 2006), which adopt a holistic vision to the service management and which emphasize the role of technology and knowledge exchange. Such theories focus on a service-based logic according to which, in economic exchange, the collaboration between two or more actors becomes central, as it fosters knowledge and skills exchange, generating value and improving the well-being of all participants to the exchange (Vargo & Lusch, 2004). Specifically, these theories argue that the resource exchange is facilitated by the predominant role of ICT, that speed social learning and helps engagement among actors (Maglio et al., 2006).

The re-reading of the smart city in the light of service theories highlights the development of collaborative logics among smart city actors, resulting in continuous processes of cooperation between public and private decision-makers and citizens, allowing multiplying moments of value creation as a result of synergistic interactions (Polese et al., 2019). In this logic, all the actors in the system take on the same importance, including citizens who are increasingly involved in service design or delivery (Nambisan & Baron, 2009). The involvement of all the actors in service design promotes the social growth of all stakeholder groups in the ecosystem (Troisi et al., 2019b).

The smart city is here understood as a smart community that aims to emphasize the need to develop innovative solutions through a collaborative approach that meets important societal challenges (Lytras & Visvizi, 2018). In this context, smart technology is considered a key lever for community well-being that fosters the emergence of sustainable growth (California institute, 2001; Ciasullo et al., 2020; Eger, 2009).

Furthermore, technology is fundamental for resource exchange among all community stakeholders (Piciocchi et al., 2013), especially for immaterial resources exchange (including information, know-how, personal experience, feedback) that allow service providers to improve service based on users' judgments and suggestions (Polese et al., 2018; Vargo & Lusch, 2008).

So that collaboration between smart community actors take place, it is necessary to facilitate the exchange of intangible resources and to know the point of view of users on smart services. Regarding this last point, Lytras et al. (2020) propose a categorization to capture user perceptions of smart city services and applications. The proposed classification, useful for managers and policymakers, has five dimensions: technological anxiety, work-life interface, orientation for involvement, support orientation, quality of life. The first dimension (technological anxiety) represents user anxiety and distrust of the use of intelligent services. The second dimension (the work-life interface) represents end-users' perception of the usefulness and usability of smart city applications for their personal and professional life. The third dimension (orientation for involvement) represents the inclination of end-users to exercise their civic rights and duties. The fourth dimension (support orientation) demonstrates the perception of end-users of the usability and friendliness of smart city services and applications

to help and assist citizens. Finally, the fifth dimension (quality of life) outlines the belief of end-users that smart city services improve the living standards of inhabitants. These dimensions represent useful information to develop user-friendly smart-city solutions.

### 3 Italian Smart Cities

Italy has the most cultural heritage in the world (1st in the ranking concerning tourism and cultural heritage according to the Country Brand Index, 2014–2015) and unique environmental heritage in the world, with its coasts, its reserves and natural landscapes. However, in the transition to the smartness of Italian urban systems, Italy starts with some delay and suffers the weakness of not having large cities.

The strong local identity and the absence of megacities affect the smart development of Italian cities and the need to find an Italian way to the smart city. These conditions led to the awareness that Italy must avoid the simple repetition of urban models developed in other contexts. The most widespread model of smart city, evolved above all in European metropolitan cities, risks producing generalizations deriving from the use of standard technologies, which often fail to enhance local identities, importing development ideas and actions not commensurate with the needs of citizens, the peculiarities of the context and the preliminary conditions of the cities. The Italian protocol on smart cities, on the other hand, intends to be based on the peculiarities of the local area and on strategies for enhancing them, working on themes such as the landscape, cultural attractions, identity, authenticity of Italian territories, accessibility, connectivity and opportunities. Technological innovations and planning strategies in Italy should therefore favor individual and collective well-being, in an approach that we can define as “human-oriented”.

In line with these objectives, Italian smart cities are characterized by (TEH-Ambrosetti, 2012):

- A not very large area that mainly exploits existing infrastructures (brownfields) by equipping them with ICT (also from a sharing economy perspective, such as spaces dedicated to co-working);
- Use of ICT tools to improve the quality of life of citizens;
- An active citizens involvement with a view to e-democracy where each aim for their well-being;
- Supranational directives on sustainable (protection for the environment) and smart development (diffusion of technologies and reduction of the digital divide);
- Decentralized governance to local authorities that follows a bottom-up approach, characterized by a low ability to find sources of financing (which derive for the most part from European funds) which encourages the use of alternative forms of financing such as crowdfunding.

Due also to this last characteristic, the situation relating to the development of Italian Smart cities appear fragmented. Although many Italian Cities meet the criteria

of smartness and have obtained recognition at a European level (EY, 2020), in Italy, there is an accentuated fragmentation and dispersion of initiatives; tendency to self-organization, together with a very heterogeneous set of solutions generically labelled as “smart” (TEH-Ambrosetti, 2012). The uneven development of smart initiatives is also reflected in the distribution of smart cities along the peninsula. Smart cities are not equally distributed throughout the territory, with a higher concentration in the north of the country (smart city Index of EY 2020). Since it is necessary to align policies and increase knowledge but above all to have a clear idea of the current Italian situation, we surveyed on the perception of Italian citizens on smart services.

## 4 Methodology

Empirical research carried out to analyze and identify the most used smart city services and the most requested services by Italian citizens is presented, to provide an overview of the phenomenon under study.

We wanted to question, on an exploratory basis, Italian cities to identify at what point in the evolutionary process towards a smart path they are.

For this purpose, we decided to use the structured questionnaire technique, in which the questions are administered in the same order and with the same terms (Bichi, 2003). More specifically, the survey was administered through an anonymous online questionnaire to a sample of people through a system that allows the data received. Respondents were asked to express opinions on the smart city services.

The interviewees were not selected through a probabilistic sampling procedure (Corbetta, 1999) but only based on the criterion of greater availability. Although this may be a limit, the statistical need to inferentially extend the data collected from the sample to the population is not part of our objectives, especially given the exploratory nature of the survey.

The survey made possible, mainly, to understand the needs and requirements of individuals, the services they generally use, the perception they have of smart city services, to encourage the development of services that on the one hand are in able to improve the well-being of citizens and the liveability of cities, on the other hand, that they pay particular attention to the protection and care of the environment.

We investigated the most used and most requested services by Italian citizens. In do this, we follow the categorization introduced by Lytras et al. (2020), which explore the underlying dimensions of users’ perceptions of smart city services. The categorization developed by Lytras et al. (2020), appears to be appropriate for the measurement of such a multidimensional construct. It is composed of the following dimensions: technology anxiety, work-life interface, engaged orientation, support orientation and quality of life. For each dimension, we asked several questions. The answers for each category are not mutually exclusive, so respondents could give multiple answers.



## 5 Results

### 5.1 Profile of Respondents

The sample socio-demographic characteristics are shown in Table 1.

The sample is made up of 204 individuals, represented by the female gender for 54.9% and the male gender for 45.1%. The age of the individuals interviewed defines a fairly wide range. The sample includes people aged between 23 and 75, of which 16.3% under 24, 60.6% between 34–25 years, 15.4% between 54–35 years, 7.7% between 75–55 years.

As regards the distribution of the sample regarding the level of education achieved, it emerges that 1% of the individuals interviewed did not attend school, 2.9% attended primary school, 43.3% attended high school, 29.8% obtained a three-year

**Table 1** Sample summary characteristics

Sample description	%	
Gender	Male	40.4
	Female	59.6
Age	< 24	16.3
	25–34	60.6
	35–54	15.4
	55–75	7.7
The highest level of education	None	1
	Elementary school	2.9
	High school	43.3
	Bachelor's degree	29.8
	Master's degree	21.2
Number of inhabitants	Research doctorate	1.9
	Up to 10.000	26
	Up to 100.000	52
	Up to 1.000.000	13.5
Employment by sector	Above 1.000.000	8.5
	Academia	16.3
	Business sector	46.2
	Non-governmental sector (NGOs)	6.8
	Homemaker	4.8
	Unemployed	5.8
I plan my own business	20.1	

Source author's elaboration

degree, 21.2% awarded a master’s degree, 1.9% continued their path with a research doctorate. Therefore, most interviewees got a high school diploma.

The sample lives in Italy. The cities in which interviewees reside foresee a number of inhabitants up to 10,000 (26%), up to 100,000 (52.9%), up to 1,000,000 (13.5%) and over 1,000,000 (7.7%).

Finally, about the work of the interviewees and the work they intend to carry out in the future, 46.2% are involved in the commercial sector, 16.3% employed in the academic field, 6.8% work in the non-governmental sector (NGO), 21.2% intend to start their own business in the future, 5.8% of individuals do not have a job and therefore are unemployed and finally, 4.8% take care of the family and children. Most people work in the commercial sector or intend to work in this area in the future.

### 5.2 Results of Smart City Services

The main results of our survey are shown below. Through the survey it is possible to define how often people use smart city services: 30.8% use them daily, 15.4% a few times a week, 6.7% once a week, 13.5% a few times a month, 3.8% once a month, 12.5% less than once a month and finally 17.3% do not use these services (Fig. 1).

Most of the sample uses the smart city services out of necessity (39.3%), for ease of use (18%) or convenience (17.2%).

Figure 2 shows the categories of services and smart applications that the sample claims to know and have used. The results obtained show that electronic parking services, e-transport services and services related to entertainment are mostly used.

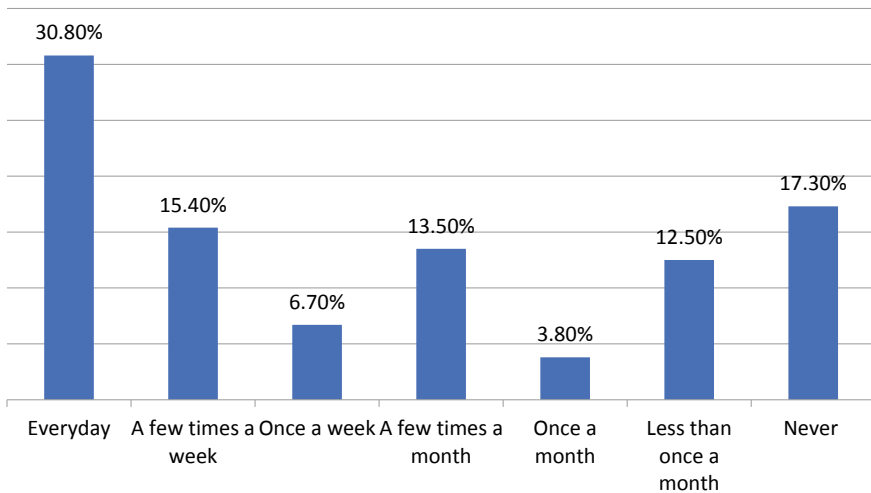
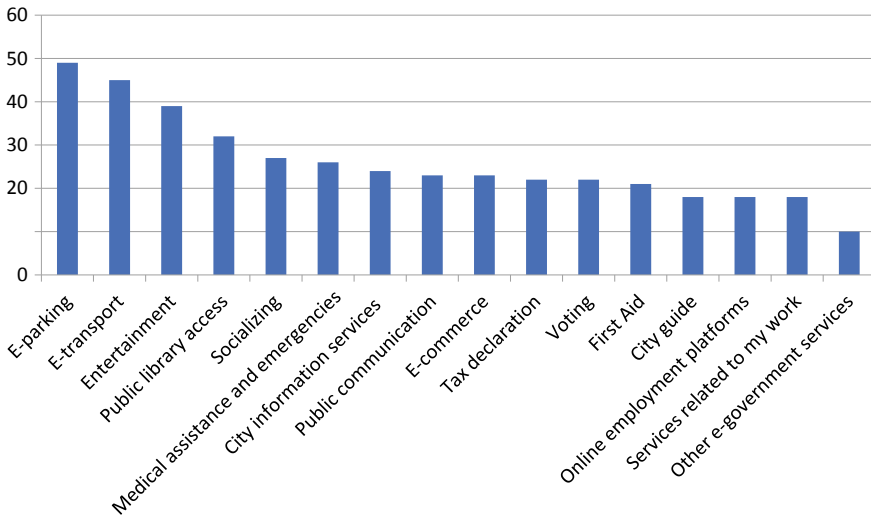


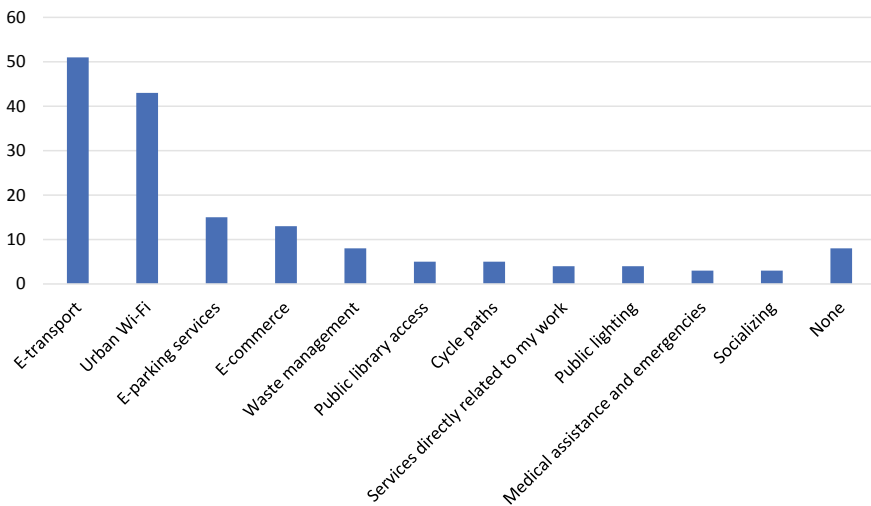
Fig. 1 Distribution of the sample for the use of smart city services. Source author’s elaboration



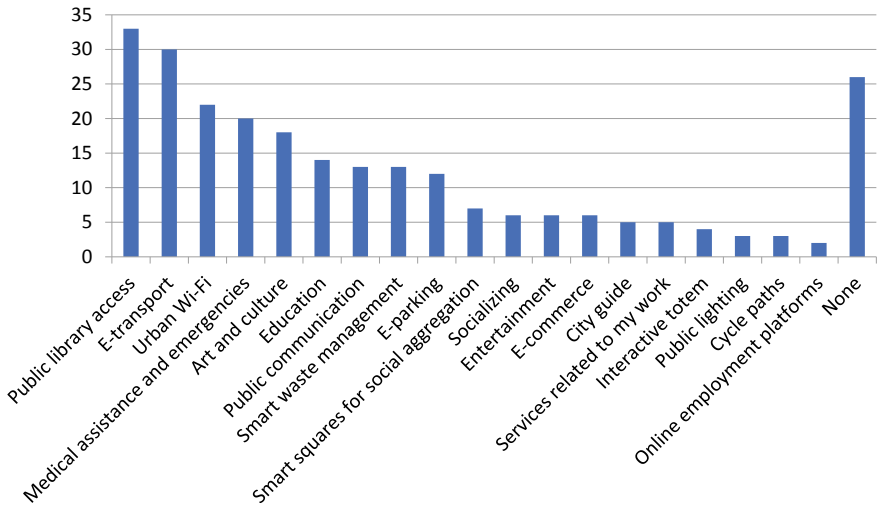
**Fig. 2** Smart city services known and used at least once by the sample. *Source* author’s elaboration

The empirical survey conducted also allowed us to know, approximately, which smart city services are regularly used by the respondents (Fig. 3).

As shown in Fig. 3, three services most used by citizens are e-transport services (51), urban wi-fi (43) and electronic parking services (15). It also emerged that for the use of these smart services, individuals mostly use mobile phones (74.6%) and computers (11.5%).



**Fig. 3** Smart services used regularly. *Source* author’s elaboration



**Fig. 4** Smart City services to improve quality of life and well-being. *Source* author's elaboration

The analysis also revealed that the main services considered essential for the improvement of personal development and for improving the quality of life and well-being are (Fig. 4): access to public libraries, e-transport, urban wi-fi, medical and health care, art and culture and education.

Based on the classification of Lytras et al. (2020), we asked a series of questions to investigate citizens' perception of smart services. For each category, we asked several questions. The answers for each category are not mutually exclusive, so respondents could give multiple answers. The main results show that:

- 25% of the sample think that city lack basic infrastructure, so smart-city services are a pointless luxury;
- 53.3% of the sample believe that job opportunities improve the general quality of life;
- 80.3% of the sample would like to see more services that enable citizen to be responsible for political life;
- 71.3% of the sample would like to see more services that allow citizen to actively participate in community life;
- 80.3% of the sample would like to see more services that enable citizen to easily locate cultural events in cities;
- 66.4% of the sample would like to see more services that allow citizen to help others and to contribute to the shared economy models;
- 86.1% of the sample would like to see more services that allow citizen to actively engage in actions aimed at environmental sustainability;
- 82.1% of the sample would like more services that meet the needs and capabilities of the elderly;

- 93.4% of the sample requires more services that help citizen in real-time in case of threats or dangerous situations;
- 82% of the sample would like more services that improve the quality of life.

## 6 Discussions and Conclusions

The work accomplishes two main results related to its research questions: (1) the identification of the most used and requested smart services in Italy, (2) the identification of areas in which policymakers should intervene to raise Italian smart cities efficiency.

Regarding the first research question, results show that the services most used by Italian citizens are e-transport services, urban Wi-Fi, electronic parking services, e-commerce and smart waste management. The most requested services are: public libraries, e-transport, urban wi-fi, medical and health care, art and culture and education.

Regarding the second research question, to identify the areas in which policymakers should intervene we referred to the classification by Lytras et al. (2020). Following such categorization, we analyze our results based on the five dimensions of users' perceptions of smart city services (technology anxiety, work-life interface, engaged citizenship, support orientation and quality of life).

Regarding the “technological anxiety” dimension, the survey results show that only a part of the sample is concerned about the return on investment in smart city services. Only 25% of the sample believes that cities lack basic infrastructure and smart city services are a useless luxury.

Regarding the dimension of “engagement orientation”, the sample shows a strong component of involvement in smart city services requested. 80.3% of the sample would like more services capable of involving and making citizens more responsible for political life, 71.3% of the sample would like more services that allow them to actively participate in community life, 80.3% of the sample would like more services that allow citizens to easily locate cultural events in cities; 86.1% of the sample would like more services that allow citizens to actively engage in actions aimed at environmental sustainability.

Regarding the “work-life interface” dimension, although only a small percentage of the sample regularly requests and uses smart services specifically related to work, the empirical survey also shows that smart city services that improve and optimize the quality of life of citizens are mainly linked to the development of new job opportunities for 53.3% of respondents.

As regards the “quality of life” dimension, 82% of the sample would like more services that improve the quality of life.

Finally, regarding the “support orientation” dimension, users show a strong will to use services that offer support in emergencies and that can help people in difficulty. 66.4% of the sample would like more services that would contribute to the shared economy model and help others, 82.1% of the sample would like to see more services

corresponding to the needs and skills of elderly people, 93.4% of the sample requires more services that help in real-time in case of threats or dangerous situations.

Ultimately, the sample is inclined to use smart city services, especially related to the involvement of citizens, the support of the weakest and the improvement of life in general. Therefore, public decision-makers could conceive practices aimed at encouraging user involvement.

In line with the highly engaging personality of Italians, users foster social responsibility and are require the provision of engagement services and community-based activities. Among the required engagement services, cultural activities play an important role. Most of the respondents intend to improve their personal development by access to libraries and culture, through education and participation in educational activities organized for citizens.

Most of the respondents think infrastructures play a role of primary importance as regards the organization of life (e.g. traffic management, waste collection, electricity). Only a small percentage of the sample believes that infrastructures have secondary importance in daily life.

The analysis also shows that a large part of the sample (80.3%) believes that smart city services help increasing citizen involvement in community life, increasing social sustainability and improving well-being and quality of life. At the same time, a slice of the sample (over 20%) does not use smart city services at all. We deduce that in Italy, there is still no collective, tangible and concrete push towards change in terms of smart services. Therefore, it would be desirable to accelerate the proposal and spread of smart city services by public bodies in these areas, to shift traditional services into a smart key, improving both the citizens' life and cities livability.

Furthermore, in Italy, where miss large metropolises and strong cultural identity exists, it is not possible to think of transforming urban centres into futuristic megapolises. The competitive advantage that emanates a unique artistic and cultural heritage in the world, and social capital among the most solid in the world, must be enhanced. These characteristics represent an opportunity to formulate an original idea of a smart city, hoping in a uniformly smarter country, in which system competitiveness and well-being of citizens are combined.

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